

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Original) An apparatus for image processing comprising:
a region detector for detecting an edge region in an image data;
a density conversion unit for reducing a density difference within the edge region detected by said region detector;
a compression unit for compressing the image data within the edge region where the density difference is reduced by said density conversion unit, using discrete cosine transform; and
an expansion unit for expanding the image data compressed by said compression unit.
2. (Original) An apparatus as claimed in claim 1, wherein said density conversion unit converts N-bit image data into (N-1)-bit image data.
3. (Original) An apparatus as claimed in claim 2, wherein said density conversion unit increases a density value of the converted (N-1)-bit image data a certain amount.
4. (Original) An apparatus as claimed in claim 1, further comprising an image reader for reading a document wherein said image data is an image data outputted by said image reader.
5. (Original) An apparatus as claimed in claim 1, further comprising a printing unit for printing an image data on a paper wherein said image data is the image data expanded by said expansion unit.

6. (Original) A method for image processing comprising the steps of:
detecting an edge region within an image data;
reducing a density difference within the edge region;
compressing the image data within the edge region where the density difference is reduced, using discrete cosine transform; and
expanding the compressed image data.

7. (Original) A method as claimed in claim 6, wherein said step of reducing a density difference is a step of converting N-bit image data into (N-1)-bit image data.

8. (Original) A method as claimed in claim 7, wherein said step of reducing a density difference includes a step of increasing a density value of the (N-1)-bit image data by a certain amount.

9. (Original) A method as claimed in claim 6, further comprising a step of reading a document and generating an image data to be processed.

10. (Original) A method as claimed in claim 6, further comprising a step of printing the expanded image data on a paper.

11. (Currently Amended) A computer program product for image processing in a computer readable medium, the computer program product including instructions to execute the following procedures: ~~comprising the steps of~~
a step of detecting an edge region within an image data;
a step of reducing a density difference within the edge region;
a step of compressing the image data within the edge region where the density difference is reduced, using discrete cosine transform; and
a step of expanding the compressed image data.

12. (Currently Amended) A computer program product as claimed in claim 11, wherein said step of reducing a density difference is a step of converting N-bit image data into (N-1)-bit image data.

13. (Currently Amended) A computer program product as claimed in claim 12, wherein said step of reducing a density difference includes a step of increasing a density value of the (N-1)-bit image data by a certain amount.

14. (Currently Amended) A computer program product as claimed in claim 11, further comprising a step of reading a document and generating an image data to be processed.

15. (Currently Amended) A computer program product as claimed in claim 11, further comprising a step of printing the expanded image data on a paper.